



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

May 14, 2007

Ms. Ruth M. Horton  
Tennessee Valley Authority  
400 W. Summit Hill Drive, WT 11D-K  
Knoxville, TN 37902

**RE: EPA Review and Comments on  
Draft Supplemental Environmental Impact Statement (DSEIS)  
Completion and Operation of  
Watts Bar Nuclear Plant Unit 2  
CEQ No. 20070113**

Dear Ms. Horton:

The U. S. Environmental Protection Agency (EPA), Region 4, reviewed the Draft Supplemental Environmental Impact Statement (DSEIS), pursuant to Section 309 of the Clean Air Act and Section 102 (2)(C) of the National Environmental Policy Act (NEPA). The purpose of this letter is to provide the Tennessee Valley Authority (TVA) with EPA's comments regarding potential impacts of the completion and operation of the Watts Bar Nuclear Plant Unit 2.

The proposed action of completing and operating the Watts Bar Nuclear plant Unit 2 would provide additional baseload capacity, and maximize the use of existing assets. The facility uses intakes from the Tennessee River for plant cooling, and discharges wastewater via three outfalls to the Tennessee River.

Based on EPA's review of the DSEIS, the project received an "EC-1" rating, meaning that environmental concerns exist. Specifically, protecting the environment involves the continuing need for appropriate storage and ultimate disposition of radioactive wastes generated on-site, as well as continuing measures to limit bioentrainment and other impacts to aquatic species from surface water withdrawals and discharges, and compliance with the NPDES Permit.

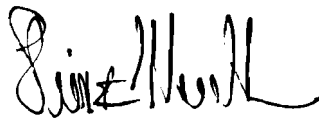
The National Pollutant Discharge Elimination System (NPDES) Permit Program authorizes the discharge of pollutants from certain facilities to waters of the United States. Administration of the NPDES permit program in Tennessee is delegated by EPA to the Tennessee Division of Water Pollution Control. The Watts Bar Nuclear Plant has an NPDES Permit issued by the Division of Water Pollution Control. The NPDES Permit limits specific pollutant discharges from the plant, requires monitoring of discharges, and regulates the flow and thermal impacts of discharges. The NPDES permittee has operated and is operating in compliance with the NPDES permit requirements.

The DSEIS acknowledges that continuing radiological monitoring of all plant effluents and appropriate storage of spent fuel assemblies and radioactive wastes on-site is required for this project. Ultimately, long-term radioactive waste disposition will require transportation of wastes to a permitted repository site. In particular, please address the following concerns in the FSEIS:

- Solid Radioactive Wastes (page 81): The shipping arrangements for Unit 2 after 2008 appear uncertain with Barnwell's closing. Please provide more information on the availability and disposal costs options for Clive, Utah facility, Sequoyah Nuclear Plant or other disposition options under consideration.
- Spent Fuel Storage (page 83): Clarify whether the referenced dry cask facility is being processed as a definite project with funding to construct it. Is Unit 2 operation contingent on this facility being constructed? Clarify where the current Unit 1 spent fuel is being stored. Does the capacity for this new facility consider the contingency of Yucca Mountain being indefinitely postponed? Is the data in Table 3-24 in addition to the data given for Unit 1, or the cumulative dimensions, capacity, etc.?

In conclusion, the DSEIS is clearly written and provides useful information for assessment of the proposal to finish and operate Unit 2. However, clarification is needed regarding radioactive waste disposition after 2008 and TVA's proposed Dry Cask storage plans. Thank you for the opportunity to comment on this document. We look forward to reviewing the FSEIS. If we can be of further assistance, please contact Ramona McConney of my staff at (404) 562-9615.

Sincerely,

A handwritten signature in black ink, appearing to read "Heinz Mueller", with a stylized, flowing script.

Heinz J. Mueller, Chief  
NEPA Program Office